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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,622	07/03/2001	John G. Apostolopoulos	10012162-1	5149

7590 10/19/2004	EXAMINER
HEWLETT-PACKARD COMPANY	HOSSAIN, TANIM M

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ART UNIT	PAPER NUMBER
2141	

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-26</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-26</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>7/3/01</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____ .

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>10062004</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 4 does not sufficiently explain the principle of the combined bitrate being as great as twice the total bitrate required by a conventional coding algorithm.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 9, 11-15, 18, 20, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Monteiro (U.S. 5,983,005).

As per claim 1, Monteiro teaches a method for streaming media data to a client, said

method comprising the steps of:

a) encoding said media data to be streamed to said client into a first multiple description

bitstream and into a second multiple description bitstream (column 4, lines 29-42; column 4, line

61 – column 5, line 8; where the decoder implies encoding); and

b) distributing said first and second multiple description bitstreams to a plurality of

servers placed at intermediate nodes throughout a network, such that said client is provided with

access to said media data via a plurality of transmission paths (figure 1; where the media servers

constitute the plurality of servers at intermediate nodes; column 2, lines 21-23; column 4, lines 6-

11).

As per claim 2, Monteiro teaches the method for streaming media data to a client as

recited in claim 1, wherein said step a) comprises: encoding said media data to be streamed to

said client into a first and second complementary multiple description bitstream wherein each of

said first and second complementary multiple description bitstreams is independently useful to

said client, and wherein each of said first and second complementary multiple description

bitstreams contains complementary information (column 4, lines 29-42; column 4, line 61 –

column 5, line 8; where the decoder implies encoding; column 2, lines 21-23; column 7, lines 36-

63).

As per claim 3, Monteiro teaches the method for streaming media data to a client as

recited in step a) of claim 1, wherein said media data to be streamed to said client is encoded into

said first and second complementary multiple description bitstreams wherein each of said first

and second complementary multiple description bitstreams are of substantially equal importance

(column 2, lines 12-20; where the audio information and video information are equally important. See also column 4, line 61 – column 5, line 8; where the different bit rates are equally important).

As per claim 4, Monteiro teaches the method for streaming media data to a client as recited in claim 1, wherein said step a) comprises: encoding said media data to be streamed to said client into a first and second complementary multiple description bitstream wherein both of said first and second complementary multiple description bitstreams do not require a combined bitrate as great as twice the total bitrate required by a conventional coding algorithm (column 4, line 66 – column 5, line 22; where the combination of bitrates is not double the total required).

As per claim 5, Monteiro teaches the method for streaming media data to a client as recited in said step a) of claim 1, wherein said media data to be streamed to said client is selected from the group comprising audio-based data, speech-based data, graphic data, and web page data (Abstract; column 2, lines 11-20).

As per claim 6, Monteiro teaches the method for streaming media data to a client as recited in claim 1, wherein said step b) comprises: distributing said first multiple description bitstream to a first server and distributing said second multiple description bitstream to a second server (column 2, lines 21-30; figure 1 and 3 also show this capability).

As per claim 9, Monteiro teaches the method for streaming media data to a client as recited in claim 1, wherein said method does not require complete duplication of said media data in order to achieve path diversity (column 4, lines 29-42, column 7, lines 36-63).

As per claim 11, Monteiro teaches a method for achieving reliability and efficiency and for reducing single points of failure in the streaming of media data to a client, said method comprising the steps of:

a) encoding said media data to be streamed to said client into a first complementary multiple description bitstream and into a second complementary multiple description bitstream, each of said first and second complementary multiple description bitstreams containing complementary information, and wherein each of said first and second complementary multiple description bitstreams is independently useful to said client (column 4, line 66 – column 5, line 22; where the decoder implies encoding; column 7, lines 36-63); and

b) distributing said first complementary multiple description bitstream and said second complementary multiple description bitstream to a plurality of servers placed at intermediate nodes throughout a network, such that said client is provided with access to said media data (figure 1; where the media servers constitute the plurality of servers at intermediate nodes; column 2, lines 21-23; column 4, lines 6-11).

Claims 12-15, and 18 are rejected on the same bases as claims 3-6, and 9 respectively, as claims 12-15, and 18 teach a method of implementing claims 3-6, and 9 respectively.

As per claim 20, Monteiro teaches a system for streaming media data to a client, said system comprising: a first server having memory coupled thereto, said first server adapted to be coupled to a network, said memory coupled to said first server having a first multiple description bitstream of encoded said media data stored thereon, said first server adapted to transmit said first multiple description bitstream of encoded said media data to a client via a first path (column 4, lines 29-42; column 4, line 61 – column 5, line 8; where the decoder implies encoding; figures

1 and 3; where the existence of memory is inherent); and a second server having memory

coupled thereto, said second server adapted to be coupled to said network, said memory coupled

to said second server having a second multiple description bitstream of encoded said media data

stored thereon, said second server adapted to transmit said second multiple description bitstream

of encoded said media data to said client via a second path (column 4, lines 29-42; column 4, line

61 – column 5, line 8; where the decoder implies encoding; figures 1 and 3; where the existence

of memory is inherent).

As per claim 21, Monteiro teaches the system for streaming media data to a client of

claim 20 further comprising: a content server coupled to said first server and said second server,

said content server adapted to provide said first multiple description bitstream of encoded said

media data to said memory coupled to said first server, said content server further adapted to

provide said second multiple description bitstream of encoded said media data to said memory

coupled to said second server (column 4, line 66 – column 5, line 22, column 7, lines 36-63;

column 2, lines 21-30; figures 1 and 3; where with the existence of a server, the existence of

memory is inherent).

Claim 22 is rejected on the same basis as claim 5, as claim 22 is a system for

implementing the method of claim 5.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7, 8, 10, 16, 17, 19, and 23-26 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Monteiro in view of Gershman (U.S. 6,401,085).

As per claim 7, Monteiro teaches the method for streaming media data to a client as

recited in claim 1, but does not specifically teach that the receiving client is a mobile client.

Gershman teaches the limitation that the receiving client is a mobile client (column 3, lines 14-

28). It would have been obvious to one of ordinary skill in the art at the time of the invention to

include this limitation, as taught by Gershman in the system of Monteiro, as they are both from

the same field of endeavor, namely the efficient reception of services over the Internet. The

existence of Internet capability on mobile devices is well known in the art, and its specific

inclusion into Monteiro's invention allows for further diversity and efficiency.

As per claim 8, Monteiro-Gershman teaches the method for streaming media data to a

client as recited in claim 7, wherein the step comprises: distributing said first and second

multiple description bitstreams to servers placed along a wired/wireless gateway (Gershman:

column 3, lines 14-28; where the existence of wireless communication constitutes the existence

of a wireless gateway system, and Monteiro teaches the wired gateway system (figures 1 and 3).

Motivations to combine teachings are discussed in the treatment of claim 7, and further, the

extension to wired Internet communication to wireless Internet communication is obvious and

well known in the art.

As per claim 10, Monteiro-Gershman teaches the method for streaming media data to a

client as recited in claim 1, wherein said method is performed in a network system selected from

the group comprising: wired and wired networks; wired and wireless networks; wireless and

wired networks; and wireless and wireless networks. The existence of a fully wired network, as taught by Monteiro, and the capability of a fully wireless network as taught by Monteiro-Gershman, allows for the capability for there to exist any combination of wired and wireless interfaces. The different combinations constitute design choices and the teaching thus obvious to one of ordinary skill in the art at the time of the invention.

Claims 16, 17 and 19 are rejected on the same bases as claims 7, 8 and 10 respectively, as claims 16, 17 and 19 teach a method of implementing claims 7, 8 and 10 respectively.

Claims 23 and 26 are rejected on the same bases as claims 7 and 10 respectively, as claims 23 and 26 teach a system for implementing the contents of claims 7 and 10 respectively.

Claims 24 and 25 are rejected on the same basis as claim 8, as claims 24 and 25 constitute a system for implementing the contents of claim 8.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a. Urano (U.S. 5,706,053) teaches a compressed motion video code processor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanim Hossain whose telephone number is 703/605-1228 until October 18, 2004, after which it becomes 571/ 272-3881. The examiner can normally be reached on 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached at 703/305-4003 until October 26, 2004, and 571/272-

3880 after that time. The fax phone number for the organization where this application or proceeding is assigned is 703/872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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